

Page 1 of 1

All amounts are calculated in domestic currency.

Grouped by Vendor ID

[illegible]

290 Chemin du Tremblay
 Boucherville QJ 4B 5X9
 TEL. 514/527-9153
 FAX. 450/641-4357
 PAGE... 1
 Order : 1162249
 Date... : 07/16/2015

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY ON CAN K6A 1K7
 DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY ON CAN K6A 1K7

SHIP VIA.....: TST OVERLAND #222212
 F.O.B.....: BOUCHERVILLE
 YOUR ORDER NO.....: P029142

SALESPERSON.....: C. Gee

Ordered	Description	Number	Pieces	Quantity	Back
01	STAINLESS ROUND BAR SBR .500 Tariff Number: 7222.20.00.92 Cust. part#: M303R0.500 HT#.....: 33762 Total...	2	2	24/FT	24/FT
02	STAINLESS ROUND BAR SBR .750 Tariff Number: 7222.20.00.92 Cust. part#: M303R0.750 HT#.....: T1D9 Total...	2	2	24/FT	24/FT
03	STAINLESS STEEL SEAMLESS TUBE SMLS TUBE 304L 3/4 X .049 A213 STS .750 .049 304L Cust. part#: M304TR0.750W.049 HT#.....: TT140120 Total...	4	4	80/FT	80/FT
04	STAINLESS STEEL SEAMLESS TUBE SMLS TUBE 304L 1/2 X .035 A213 STS .500 .035 304L Cust. part#: M304TR0.500W.035 HT#.....: YX1305-692 Total...	1	1	20/FT	20/FT

Total Weight.....: 84.9
 Packaging:

VIRAJ

VIRAJ PROFILES LIMITED

Regd & Mktg Off: G-33 & 34, MIDC, Industrial Area, Tarapur, Thane (Dist), Maharashtra, INDIA - 401506. E-Mail: sales@viraj.com
Works: SURVEY No- 114, 119 & 120, VILL. Mahagaon, Tal: Palgarh, Dist: Thane-401501, MAHARASHTRA, INDIA, vieqpc@viraj.com

TEST CERTIFICATE

CUSTOMER FIDELITY PAC METALS LTD. 1303 North Service Rd East, Unit 1, Oakville ON P03103
L6H 1A7
CANADA
BUNDLE NO : 1100194847
DESCRIPTION STAINLESS STEEL BRIGHT BARS
COLD DRAWN POLISHED - 2H
SIZE 1/2" **SHAPE** ROUND **TOLERANCE** ASTM A484 12" - 14" **LENGTH** 101 **PIECES** 820.000 LB
WEIGHT 9-89 14 DAS 1507/20

GRADE T-303 **HEAT No** 33762

CHEMICAL ANALYSIS

%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Cu	%Mo	%Co	%N2
0.0470	1.910	0.470	0.3050	0.0330	17.400	8.100	0.550	0.320	0.160	0.03600

TEST RESULTS

0.2% yield strength ksi	Tensile strength ksi	Elongation %	Reduction Of Area %	Hardness BHN	Grain Size NOS
94.0	108.0	38.0	57.0	218.0	7.0

SPECIFICATION: MATERIAL CONFORMS TO DIN 10088-3:2005 COND A & ASTM A 582/A582M-13 COND A, ASTM A 388-05, ASTM A 484-10, AMS 5640R TYPE I, EXCEPT MARKING, Q&S-764BA2 COND A, EXCEPT MARKING, UNS-S-30300 ASTM A314-2008, ASTM A320/A320M-11a B8F CLASS 1, ASME SA 320 B8F CL1 MIL-S-862 B GRADE AISI 303 & WNR 1.4303. CERTIFIED AS PER EN 10204-3.1

REMARKS MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD OR WELD REPAIRS, MICRO-FREE FROM CONTINUOUS CARBIDE NETWORK ON GRAIN BOUNDARIES, MACRO-GOOD, MINIMUM SOLUTION ANNEALING TEMPERATURE 1050C, SOAKING TIME 1/2 HRS, WATER QUENCHED, MELT SOURCE, ADD, WE CONFIRM THAT THE MATERIAL HAS BEEN TESTED AND FOUND TO BE FREE FROM RADIOACTIVE CONTAMINATION, COUNTRY OF ORIGIN: INDIA.

We hereby certify that the material described above has been tested and complies with the terms of order/contract.

WORKS INSPECTOR
K R K MURTHY

O.C. Reviewed
5/10/31/14



740 Imperial Road North

Certificate: 37287 17
Customer: 007080 003

Ship To:
MARMON KEYSTONE CANADA, INC.
290 CHEMIN DU TREMBLAY
BOUCHERVILLE, QC J4B5X9

Date: 3/03/2015 Page: 1
Steel: 303
Finish: CD

North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

METALLURGICAL TEST REPORT

Your Order: MN4604

NAS Order: IN 0206619 04

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
ASTM A582/12 EN 10204 3.1, ASTM A484/11
AMS 5640U TYPE 1, QQS-764B CONDITION A
SOLUTION ANNEAL TEMP 1900F MIN

REMARKS:

COMPLIES W/REQUIREMENTS OF DPAR 252.225-7009 EU DIRECTIVE
2011/65/EU. ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Corrosion:

Product Id	Skid #	Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BG9837 9		.7500		833	144.00	6	1	

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323
Chemical Analysis per ASTM A751/08

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
T1D9	US	.0415	.2285	17.1590	.3805	1.7955	.3075	.0361	8.3065	.0300
	S %		SI %							
		.3233	.4415							

MECHANICAL PROPERTIES

Product Id	Id	HB	2YS	UTS	RA	Elong
BG9837 9	R L	172.0	74.64	106.10	27.68	18.86

Q.9. Reviewed
SK03/24/15

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

ABHIJEET BHAVE 3/03/2015



SHANGHAI CRYSTAL PALACE PIPE CO., LTD

LAO GANG, PUDONG NEW AREA DISTRICT, SHANGHAI, CHINA

MILL TEST CERTIFICATE

CRYSTAL-PALACE

ISO9001:2008 ; PED Material Certificate (No.:QAC0021058/A) DATE OF ISSUE: 2015/05/02

CUSTOMER: MARMON/KEystone CANADA INC.										CERTIFICATE NO : 2015-1-8-A-4							
PO NO BN4551										ORDER NO. 2015-01-008-A							
COMMODITY: STAINLESS STEEL SEAMLESS TUBING										GRADE: ASTM-A213-13/ASME SA213-13 TP304/TP304L							
CONDITION: COLD FINISH / SOLUTION TREATED / PICKLED / PLAIN END / OD POLISHED 400 GRIT										HEAT NO. YT140120							
CHEMICAL CONTENTS (WT%)																	
ELEMENTS		C	Mn	P	S	Si	Ni	Cr									
SPECIFICATION		≤ 0.035	≤ 2.00	≤ 0.040	≤ 0.030	≤ 0.75	8.0~11.0	18.0~20.0									
RESULTS (LADLE)		0.027	1.04	0.039	0.004	0.41	8.07	18.10									
PHYSICAL PROPERTIES																	
Dimensions		W T	Length	Bundle No	Pieces	Weight	(kg)	0.2%YS	(Mpa)	T S	EL	(Mpa)	FLATTENING	TEST	HARDNESS	HRB	EDDY
O D	(inch)	(inch)	(feet)														
0.750	0.049	20	Z15-2-80	50	168	295	680	62.5	OK	OK	OK	75	OK	(DRILLED HOLE)			
REMARKS:																	
AS PER ASTM A213-13/ASME SA213-13																	
WALL THICKNESS TOLERANCE AS PER ASTM A269-13																	
IN COMPLIANCE TO NACE MR0175-2003																	
IC TEST TO ASTM A262 PRACTICE E																	
SOLUTION HEAT TREATMENT : 1050°C X 1.5m/min																	
NO WELD REPAIR WAS PERFORMED																	
FREE FROM MERCURY CONTAMINATION																	
COUNTRY OF ORIGIN: CHINA																	
MILL TEST CERTIFICATE TO EN 10204/3.1																	
INVOICE NO: YK-15-04-59																	
1 WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT																	
2 THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY																	
SHANGHAI CRYSTAL PALACE PIPE CO., LTD																	
QC REVIEW																	
JUN 10 2015																	
Dingweiguo																	
MANAGER OF QUALITY ASSURANCE DEPARTMENT / DING WEI-GUO																	



SHANGHAI CRYSTAL PALACE PIPE CO., LTD

LAO GANG, PUDONG NEW AREA DISTRICT, SHANGHAI, CHINA

CRYSTAL-PALACE

MILL TEST CERTIFICATE

ISO9001:2008 ; PED Material CERTIFICATE (No.: QAC0021058/A) DATE OF ISSUE: 2013/11/3

CUSTOMER: MARMON/KEystone CANADA INC.		CERTIFICATE NO.: 2013-7-17-E-1								
P.O.NO.: BN3759		ORDER NO.: 2013-07-017-E								
COMMODITY: STAINLESS STEEL SEAMLESS TUBING		GRADE: ASTM A213-11a/ASME SA213-10 TP304/TP304L								
CONDITION: COLD FINISH / SOLUTION TREATED / PICKLED / PLAIN END		HEAT NO.: YX1305-692								
CHEMICAL CONTENTS (WT%)										
ELEMENTS	C	Mn	P	S	Si	Ni	Cr			
SPECIFICATION	≤0.035	≤2.00	≤0.040	≤0.030	≤0.75	8.0~11.0	18.0~20.0			
RESULTS (LADLE)	0.019	0.67	0.028	0.001	0.40	8.07	18.36			
PHYSICAL PROPERTIES										
Dimensions		Bundle No.	Pieces	Weight (kg)	0.2%YS (Mpa)	T S (Mpa)	EL (%)	FLATTENING TEST	HARDNESS HRB	EDDY CURRENT TEST TO E426 (100%)
O.D (inch)	W.T (inch)	Length (feet)								
0.375	0.035	20	1250	1457	320	640	61.5	OK	74	OK (DRILLED HOLE)
0.500	0.035	20	500	797	265	655	65.5	OK	70	OK (DRILLED HOLE)
REMARKS: AS PER ASTM A213-11a/ASME SA213-10 WALL THICKNESS TOLERANCE AS PER ASTM A269-10 IN COMPLIANCE TO NACE MR0175-2003 IC-TEST TO ASTM A262 PRACTICE E SOLUTION HEAT TREATMENT : 1050°C X 1.5m/min NO WELD REPAIR WAS PERFORMED FREE FROM MERCURY CONTAMINATION COUNTRY OF ORIGIN: CHINA MILL TEST CERTIFICATE TO EN 10204/3.1 INVOICE NO: YK-13-11-13				1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT 2. THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY. SHANGHAI CRYSTAL PALACE PIPE CO., LTD				QC REVIEWED DEC 18 2013		
MANAGER OF QUALITY ASSURANCE DEPARTMENT / DING WEI-GUO										



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER
Purchase Order ID PO29142
Purchase Order Date 7/15/2015
PO Print Date 7/15/2015
Page Number 1 of 2

Order From : VC-MAR001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

MARMON/KEYSTONE CANADA LTD.
290 CHEMIN DU TREMBLAY
BOUCHERVILLE, QC J4B 5X9
CA

Contact Name	Vendor Phone	800 361 8142
Ship To Contact	Ship To Phone	
Ship Via:		TST ground
Ship Acct:		
Buyer	Customer POID	10127-2607
Customer Tax #	Terms	Net 30
Currency	FOB	Destination-Collect

Line	Reference	Description/	Reg Date/	CD	Reg Qty/	Unit of	Measure	Extended
Nbr	Vendor Part Number	Mfg ID	Taxable					Price
Line Comments								
Delivery Comments								
Promise Date								

1	M303R0.500	303 Round Bar 0.500"	7/17/2015	Yes	24.00	f	\$1.47	\$35.28
PURCHASE MATERIAL: AISI 303 SS ROUND BAR								
(NOTE: AISI 304/316 NOT ACCEPTABLE)								
SPECIFICATION: ASTM-A582								

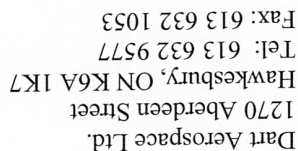
2	M303R0.750	303 Round Bar 0.750	7/17/2015	Yes	24.00	f	\$3.30	\$79.20
as above								
Line Total:								
								\$35.28

3	M304TR0.750W.049	304 RD Tube .750 x .049W	7/17/2015	Yes	80.00	f	\$2.00	\$160.00
PURCHASE MATERIAL: AISI 304/316 SS SEAMLESS								
ROUND TUBING								
SPECIFICATION: ASTM A213 OR ASME SA213 OR ASTM A269								
Line Total:								
								\$79.20

Note:

7/15/2015

80150717



Purchase Order ID PO29142

Purchase Order Date 7/15/2015
PO Print Date 7/15/2015

Page Number 2 of 2

Order From : VC-MAR001

MARMON/KEYSTONE CANADA LTD.
290 CHEMIN DU TREMBLAY
BOUCHERVILLE, QC J4B 5X9
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone
Ship To Contact
Ship To Phone
Ship Via:
Ship Acct:

800 361 8142
TST group

Buyer	Customer POID	Customer Tax #	Terms	Currency	FOB
-------	---------------	----------------	-------	----------	-----

Linda Lacelle
10127-2607
Net 30
CAD
Destination-Collect

as above

5 71401-45

Procurement Quality

7/17/2015
NO

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical te
A016 personnel qualification
A017 raw material identification
A026 certification of material
A041 quality management sys
A042 dart notification by suppl
A043 retention of quality docu

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 2

Change Date: 7/15/2015

PO Total: \$296.48

Line Total: \$0.00

00.0\$	00.0\$
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Line Total: \$22.00

\$1.10	\$22.00
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Line Total: \$160.00

290 CHEMIN DU TREMBLAY BOUCHERVILLE QU CAN J4B 5X9
Tel -514-527-9153 Wats 1-800-361-8142 FAX -450-641-4357

SOUMISSION/QUOTATION

Territory: 16T

Telephone: 613 632 9577
Fax: 613 632 1053

Ship To:

DART AEROSPACE LTD
1270 ABERDEEN STREET

HAWKESBURY ON CAN K6A 1K7

Salesperson
C. Gee

Your Reference No.

ATTN.: LINDA LACELLE

Sold To:

DART AEROSPACE LTD
1270 ABERDEEN STREET

HAWKESBURY ON CAN K6A 1K7

F.O.B
BOUCHERVILLE

Ship Via
TST OVERLAND #222212

Terms

TOUTE VENTE EST ASSUJETTE AUX CONDITIONS GÉNÉRALES DE MARMON KEYSTONE CANADA ET CELLES-CI PEUVENT ÊTRE TROUVÉES À L'ADRESSE WWW.MKCANADA.COM

ALL SALES ARE SUBJECT TO MARMON KEYSTONE CANADA INC.'S TERMS AND CONDITIONS OF SALE THAT CAN BE FOUND AT WWW.MKCANADA.COM

Nous vous remercions de votre demande de prix et il nous fait plaisir de vous soumettre les renseignements. / We thank you for your inquiry and take pleasure in quoting on your requirements as follows:

Quantité/ Quantity	Description	Jours Livraison Days	Prix Pricing
Ligne - 1 24 FT	STAINLESS ROUND BAR A582 SBR .500 303 Stock	1	1.470/FT 35.28
Ligne - 2 24 FT	STAINLESS ROUND BAR A582 SBR .750 303 Stock	1	3.300/FT 79.20
Ligne - 3 80 FT	STAINLESS STEEL SEAMLESS TUBE A/SA213 AW, OD POL.320/400 STS .750 .049 304L 2-3 days	1	2.000/FT 160.00
Ligne - 4 20 FT	STAINLESS STEEL SEAMLESS TUBE A/SA213 AW, OD POL.320/400 STS .500 .035 304L Stock REGRET SUR LA BALANCE Energy Surcharge	1	1.100/FT 22.00
Montant total/ Total Amount: 316.43			
Poids total/ Total weight: 84.9 lbs			

Taxes applicables: En sus/ All applicable taxes Extra:
Tarifs douaniers/ Duty

Les prix soumis sont en fonds canadiens sauf si précisé autrement/
All prices quoted in Canadian Dollars unless otherwise stated.



Services de distribution Marmon/La société Berkshire Hathaway

290 CHEMIN DU TREMBLAY BOUCHERVILLE, QU J4B 5X9
 Tél: 514 527-9153 Fax: 514 527-9153
 E-mail: cgee@mkcdn.com

Confirmation de la Commande/Order Confirmation

ATTN.: DART AEROSPACE LTD

Sold To: DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY ON CAN K6A 1K7
 Ship To: DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY ON CAN

Telephone: 613 632 9577 Fax: 613 632 1053

EXPEDIE PAR/SHIP VIA	F.A.B./ F.O.B.	BOUCHERVILLE	TER / TER	DATE DE LA COMMANDE/ORDER DATE	1162249
1ST OVERLAND #222212	VENDEUR /SALES/PERSON	C. Gee	16T	07/15/2015	P029142
Quantité/Quantity	Description	ETA	Prix/Price	Montant/Amount	

Line - 1	24 FT	STAINLESS ROUND BAR A582	SBR .500 CD	CUST. PART#: M303R0.500	07/16/2015	1.470/FT	35.28
Line - 2	24 FT	STAINLESS ROUND BAR A582	SBR .750 CD	CUST. PART#: M303R0.750	07/16/2015	3.300/FT	79.20
Line - 3	80 FT	STAINLESS STEEL SEAMLESS TUBE A/SA213 AW, OD POL.320/400	STS .750 .049 304L	CUST. PART#: M304TR0.750W.049	07/16/2015	2.000/FT	160.00
Line - 4	20 FT	STAINLESS STEEL SEAMLESS TUBE A/SA213 AW, OD POL.320/400	STS .500 .035 304L	CUST. PART#: M304TR0.500W.035	07/16/2015	1.100/FT	22.00
Energy Surcharge							
Thank you Linda!							
19.95							

TOUTE VENTE EST ASSUJETTE AUX CONDITIONS GÉNÉRALES DE MARMON KEYSTONE CANADA ET	Montant Total/ Total amount: 316.43	Poids Total/ Total weight: 84.9 lbs
CELLES-CI PEUVENT ÊTRE TROUVÉES À L'ADRESSE www.mkcanada.com ALL SALES ARE SUBJECT TO MARMON KEYSTONE CANADA INC.'S TERMS AND CONDITIONS OF SALE THAT CAN BE FOUND AT www.mkcanada.com Taxes applicables en sus. Les Prix sont en Fonds Canadiens sauf si précisé autrement. All applicable taxes extra. All prices in Canadian Dollars unless otherwise stated.		

Merci pour votre commande / We thank-you for your order

Marmon/Keystone Canada Inc.



ACIERS SPÉCIALISÉS

PACKING SLIP

PAGE.: 1
Order : 1162249
Date... : 07/16/2015

290 Chemin du Tremblay
Boucherville QJ CAN J4B 5X9
TEL. 514/527-9153
FAX. 450/641-4357

SHIPPED TO:

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY ON CAN K6A 1K7

SOLD TO:

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY ON CAN K6A 1K7

SHIP VIA..... : TST OVERLAND #222212
P.O.B..... : BOUCHERVILLE
YOUR ORDER NO..... : F029142

SALESPERSON..... : C. Gee

Ordered	Description	Number	Quantity	Back
01	STAINLESS ROUND BAR SBR .500 CD 303 Tatiff Number: 7222.20.00.92 Cust. part#: M303R0.500 HT#..... : 33762 Total...	2	24/FT	24/FT
02	STAINLESS ROUND BAR SBR .750 CD 303 Tatiff Number: 7222.20.00.92 Cust. part#: M303R0.750 HT#..... : T1D9 Total...	2	24/FT	24/FT
03	STAINLESS STEEL SEAMLESS TUBE SMLS TUBE 304L 3/4 X .049 A213 STS .750 .049 304L Cust. part#: M304TR0.750W.049 HT#..... : YT140120 Total...	4	80/FT	80/FT
04	STAINLESS STEEL SEAMLESS TUBE SMLS TUBE 304L 1/2 X .035 A213 STS .500 .035 304L Cust. part#: M304TR0.500W.035 HT#..... : YX1305-692 Total...	1	20/FT	20/FT
Fax all papers to Linda Lachelle 613-632-1053 rev:01/11 GD				

Packaging:

Total Weight..... : 84.9

Customers.. :

A Marmon Distribution Services / Berkshire Hathaway Company



VIRAJ PROFILES LIMITED

Regd & Mktg Off: G-33 & 34, MIDC, Industrial Area, Tlacupur, Thane (Dist), Maharashtra, INDIA - 401506, E-Mail: sales@viraj.com
 Works: SURVEY No- 114, 119 & 120, VIL, Mahagaon, Tal: Palgarh, Dist: Thane-401501, MAHARASHTRA, INDIA, vie@viraj.com



TEST CERTIFICATE

CUSTOMER FIDELITY PAC METALS LTD.
 1303 North Service Rd East, Unit 1, Oakville ON L6H 1A7
 CANADA
BUNDLE NO : 1100194847
DESCRIPTION STAINLESS STEEL BRIGHT BARS
 COLD DRAWN POLISHED - 2H
SIZE 1/2" **SHAPE** ROUND **TOLERANCE** 12 - 14 **LENGTH** 101 **PIECES** 820,000 LB **WEIGHT**
PACKING LIST NO 51/974294/3 **INSPECTION NO** 100004059127 **GRADE** T-303 **DATE** 13.07.2014 **HEAT NO** 33762

SIZE	SHAPE	TOLERANCE	LENGTH	PIECES	WEIGHT
1/2"	ROUND	ASTM A484	12 - 14	101	820,000 LB

CHEMICAL ANALYSIS									
%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Cu	%Mo	%N
0.0470	1.910	0.470	0.0050	0.0330	17.400	8.100	0.550	0.320	0.160
									0.03600

TEST RESULTS									
0.2% yield	Tensile	Elongation	Reduction Of	Hardness	Grain Size				
ksi	Strength	%	%	BHN	NOS				
94.0	108.0	38.0	57.0	218.0	7.0				

SPECIFICATION:
 MATERIAL CONFORMS TO DIN 10084-3:2005 COND-A & ASTM A 362/A582M-13 COND A, ASTM A 388-05, ASTM A 484-10, AMS 5640R TYPE I, EXCEPT MARKING, Q05-T64BA3 COND A, EXCEPT MARKING, UNS-S-30308 ASTM A314-2008, ASTM A320/A320M-11a B8F CLASS 1, ASME SA 320 B8F, CL1 ML-S-862 B GRADE AISI 303 & WNR 1.4303.
 CERTIFIED AS PER EN 10204, 3.1

REMARKS
 MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD OR WELD REPAIRS, MICRO FREE FROM CONTINUOUS CARBIDE NETWORK ON GRAIN BOUNDARIES. MACRO GOOD, MINIMUM SOLUTION ANNEALING TEMPERATURE 1050C, SOAKING TIME 1/2 HRS, WATER QUENCHED, MELT SOURCE: AD, WE CONFIRM THAT THE MATERIAL HAS BEEN TESTED AND FOUND TO BE FREE FROM RADIOACTIVE CONTAMINATION, COUNTRY OF ORIGIN: INDIA.

We hereby certify that the material described above has been tested and complies with the terms of order/contract.

O.C. Reviewed
 Sd/- 10/3/14

WORKS INSPECTOR
 K R K MURTHY



740 Imperial Road North

METALLURGICAL TEST REPORT

North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

Certificate: 37287 17

Ship To:

Customer: 007080 003
MARCON KEYSTONE CANADA, INC.
290 CHEMIN DU TREMBLAY
BOUCHERVILLE, QC J4B5X9

Date: 3/03/2015 Page: 1
Steel: 303
Finish: CD
Corrosion:

Your Order: MN4604

NAS Order: IN 0206619 04

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
ASTM A582/12 EN 10204 3.1, ASTM A484/11
AMS 5640U TYPE 1, QQS-754B CONDITION A
SOLUTION ANNEAL TEMP 1900F MIN

REMARKS:

COMPLIES W/REQUIREMENTS OF DEAR 252.225-7009 EU DIRECTIVE
2011/65/EU, ROHS, EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	Length	Mark	Pieces	Commodity Code
BC9837 9		.7500		833	144.00	6	1	

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Lab Accreditation Bureau, ISO/IEC 17025, Certificate# E2323
Chemical Analysis per ASTM A751/08

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
WID9	US	.0415	.2285	17.1590	.3805	1.7955	.3075	.0361	8.3065	.0300
	S %	SI %								
	.3233	.4415								

MECHANICAL PROPERTIES

Product Id	1 0 o i c r	HB	.2YS KSI	UTS KSI	RA %	Elong % 4D
BC9837 9	RL	172.0	74.64	106.10	27.6B	18.8B

Q.G. Reviewed
3/03/2015

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.

ABHIJEET BHAVE

3/03/2015

Marmon/Keystone Canada Inc. MK#-1162249 Item-SBR .750 CD 303 Heat #-TID9



SHANGHAI CRYSTAL PALACE PIPE CO., LTD

LAO GANG, PUDONG NEW AREA DISTRICT, SHANGHAI, CHINA

CRYSTAL-PALACE

MILL TEST CERTIFICATE

ISO9001:2008 PED Material CERTIFICATE (No.:QAC0021058/A) DATE OF ISSUE: 2015/05/02

CUSTOMER: MARMON/KEYSTONE CANADA INC.										CERTIFICATE NO: 2015-1-8-A-4	
P O NO BN4551										ORDER NO. 2015-01-008-A	
COMMODITY: STAINLESS STEEL SEAMLESS TUBING										GRADE: ASTM A213-13/ASME SA213-13 TP304/TP304L	
CONDITION: COLD FINISH / SOLUTION TREATED / PICKLED / PLAIN END / OD POLISHED 400 GRIT										HEAT NO.: YT140120	
CHEMICAL CONTENTS (WT%)											
ELEMENTS											
C Mn P S Si Ni Cr											
SPECIFICATION											
RESULTS (LADLE)											
C 0.035 Mn 1.04 P 0.039 S 0.004 Si 0.75 Ni 8.07 Cr 18.10											
PHYSICAL PROPERTIES											
1 WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT											
2 THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY											
SHANGHAI CRYSTAL PALACE PIPE CO., LTD											
QC REVIEW JUN 10 2015											
MANAGER OF QUALITY ASSURANCE DEPARTMENT / DING WEI-GUO											

REMARKS:		AS PER ASTM A213-13/ASME SA213-13		WALL THICKNESS TOLERANCE AS PER ASTM A269-13		IN COMPLIANCE TO NACE MR0175-2003		IC TEST TO ASTM A262 PRACTICE E		SOLUTION HEAT TREATMENT: 1050°C X 1.5m/min		NO WELD REPAIR WAS PERFORMED		FREE FROM MERCURY CONTAMINATION		COUNTRY OF ORIGIN: CHINA		MILL TEST CERTIFICATE TO EN 10204/3.1		INVOICE NO: YK-15-04-59	
DIMENSIONS		BUNDLE NO		PIECES		WEIGHT (KG)		0.2%YS (MPa)		TS (MPa)		EL (%)		FLARING TEST		FLATTENING TEST		HARDNESS HRB		EDDY CURRENT TEST TO E426 (100%)	
O.D (inch)		W.T (inch)		LENGTH (feet)		20		Z15-2-80		50		168		295		680		62.5		OK	
0.750		0.049		0.049		20		Z15-2-80		50		168		295		680		62.5		OK	



SHANGHAI CRYSTAL PALACE PIPE CO., LTD

LAO GANG, PUDONG NEW AREA DISTRICT, SHANGHAI, CHINA

CRYSTAL-PALACE

MILL TEST CERTIFICATE

ISO9001:2008 ; PED Material CERTIFICATE (No.: QAC0021058/A) DATE OF ISSUE: 2013/11/3

CUSTOMER: MARMON/KEYSTONE CANADA INC.		CERTIFICATE NO.: 2013-7-17-E-1									
P.O.NO.: BN3759		ORDER NO.: 2013-07-017-E									
COMMODITY: STAINLESS STEEL SEAMLESS TUBING		GRADE: ASTM A213-11a/ASME SA213-10 TP304/TP304L									
CONDITION: COLD FINISH / SOLUTION TREATED / PICKLED / PLAIN END		HEAT NO.: YX1305-692									
CHEMICAL CONTENTS (WT%)											
ELEMENTS		C	Mn	P	S	Si	Ni	Cr			
SPECIFICATION		≤0.035	≤2.00	≤0.040	≤0.030	≤0.75	8.0~11.0	18.0~20.0			
RESULTS (LADLE)		0.019	0.67	0.028	0.001	0.40	8.07	18.36			
PHYSICAL PROPERTIES											
Dimensions		Bundle No.		Pieces	Weight (kg)	0.2%YS (Mpa)	T S (Mpa)	EL (%)	FLATTENING TEST	HARDNESS HRB	EDDY CURRENT TEST TO E426 (100%)
O.D (inch)	W.T (inch)	Length (feet)									
0.375	0.035	20	G13-9-166	1250	1457	≥205	≥515	≥35	OK	74	OK (DRILLED HOLE)
0.500	0.035	20	P13-10-88	500	797	≥265	≥555	≥55	OK	70	OK (DRILLED HOLE)
REMARKS:											
AS PER ASTM A213-11a/ASME SA213-10											
WALL THICKNESS TOLERANCE AS PER ASTM A269-10											
IN COMPLIANCE TO NACE MR0175-2003											
IC TEST TO ASTM A262 PRACTICE E											
SOLUTION HEAT TREATMENT : 1050°C X 1.5m/min											
NO WELD REPAIR WAS PERFORMED											
FREE FROM MERCURY CONTAMINATION											
COUNTRY OF ORIGIN: CHINA											
MILL TEST CERTIFICATE TO EN 10204/3.1											
INVOICE NO: YK-13-11-13											
1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT											
2. THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.											
SHANGHAI CRYSTAL PALACE PIPE CO., LTD											
QC REVIEWED											
DEC 18 2013											
MANAGER OF QUALITY ASSURANCE DEPARTMENT / DING WEI-GUO											

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: H303

DATE: 15/07/20

MATERIAL CERT REC'D: 410

QUANTITY RECEIVED: 24'

QUANTITY INSPECTED: 24'

QUANTITY REJECTED: _____

THICKNESS ORDERED: .500" RB

THICKNESS RECEIVED: .500" RB

SHEET SIZE ORDERED: _____

SHEET SIZE RECEIVED: _____

PO / BATCH NO.: 29142/M13275

DESCRIPTION	NCR (Check Y/N)	COMMENTS
-------------	-----------------	----------

SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.				
RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

Testers located in the Quality Office

QC 18 INSPECTION

ENGINEERING SIGNOFF (if required)

INSPECTED BY: DAS
14
9-89

DATE: 15/07/20

SIGNED OFF BY: _____

DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

H:\FORMS\Quality Assurance\approved QA\MRIF Material Receipt Inspection Form revB

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303 DATE: 15/07/20

QUANTITY INSPECTED: 24 QUANTITY RECEIVED: 24 MATERIAL CERT REC'D: 40

QUANTITY REJECTED: 0

THICKNESS ORDERED: .750 RB THICKNESS RECEIVED: .750 RB

SHEET SIZE ORDERED: SHEET SIZE RECEIVED:

PO / BATCH NO.: 29142/M13275

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/> Y	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	
CORROSION	<input checked="" type="checkbox"/> Y	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y	
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	
PHOTO REQUIRED	<input checked="" type="checkbox"/> Y	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/> Y	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

Testers located in the Quality Office

QC 18 INSPECTION	INSPECTED BY: <u>14 9-89</u>	DATE: <u>15/07/20</u>
ENGINEERING SIGNOFF (if required)	SIGNED OFF BY: <u> </u>	DATE: <u> </u>

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

PO / BATCH NO.: 29142 / M132775

MATERIAL: H304
DATE: 15/07/20

MATERIAL CERT REC'D: 400
QUANTITY RECEIVED: 20'
QUANTITY INSPECTED: 20'
QUANTITY REJECTED:
THICKNESS ORDERED: 20'
THICKNESS RECEIVED: 20'
SHEET SIZE ORDERED:
SHEET SIZE RECEIVED:

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	(Y)	✓
CORRECT FINISH	(Y)	✓
CORROSION	(Y)	✓
CORRECT GRAIN DIRECTION	(Y)	✓
CORRECT MATERIAL	(Y)	✓
CORRECT THICKNESS	(Y)	✓
PHOTO REQUIRED	(Y)	✓
CORRECT REF # TO LINK CERT	(Y)	✓
CORRECT MATERIAL IDENTIFICATION	(Y)	✓
CORRECT M# ON THE MATERIAL	(Y)	✓
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	(Y)	✓
DOES THIS REQUIRE AN EXTRUSION REPORT	(Y)	✓

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.	RECORD RESULTS BELOW	HRC	HRB	DUR A	DUR D
TYPE OF MATERIAL	SIZE OF TEST SAMPLE	HARDNESS / DUROMETER READING			

Testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)	INSPECTED BY: 14 9-89	DATE: 15/07/20
		SIGNED OFF BY:	DATE:

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304 DATE: 15/07/20

THICKNESS ORDERED: 250X.0440 THICKNESS RECEIVED: 250X.0440

SHEET SIZE ORDERED: 250X.0440 SHEET SIZE RECEIVED: 250X.0440

MATERIAL CERT REC'D: 44 QUANTITY RECEIVED: 80 QUANTITY INSPECTED: 80 QUANTITY REJECTED: 0

PO / BATCH NO.: 29142/M304

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.				
TYPE OF MATERIAL	SIZE OF TEST SAMPLE	HARDNESS / DUROMETER READING	HRC	HRB
DUR D	DUR A	DUR D		

testers located in the Quality Office

QC 18 INSPECTION

ENGINEERING SIGNOFF (if required)

INSPECTED BY: DAS 14 9-89

DATE: 15/07/20

SIGNED OFF BY: _____

DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in